



No.	Author	Date
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	Title	
	2007 Spring Ring-necked Pheasant Crowing Count Survey	

Abstract: Along the four annual survey routes of Indiana's ring-neck pheasant crowing count conducted in Newton and Benton Counties, the number of roosters heard per stop did not significantly change between the spring of 2006 and the spring of 2007. An average of 0.89 crowing pheasants were heard per stop during the spring 2007 survey while an average of 1.15 roosters was heard/stop in 2006. The 2007 count average of 0.89 was 34% lower than the 10-year average of 1.34 roosters/stop and 71% below the long-term average of 3.09 roosters/stop, but only the long-term average was significantly greater ($P=0.00004$).

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The colorful ring-necked pheasant is a well-known game bird of Indiana and the Midwest. This naturalized, yet embraced species was introduced from Asia to California in 1857, and Indiana became involved in stocking ring-necked pheasants around 1900. After finding a niche in the agricultural land of Northern and Central Indiana, the ring-necked pheasant has remained a sought after upland game species by Hoosier hunters. As with many other Indiana species, annual research is conducted on the ring-necked pheasant. The information that is gathered from this research is used to set forth management priorities and harvest regulations in coming years.

Methods

Since 1976, The Indiana Division of Fish and Wildlife has conducted an annual ring-necked pheasant crowing count to determine a spring male population index. The annual survey is conducted on four road routes in Benton and Newton counties. Every five years, eleven additional road routes are surveyed for crowing pheasants. These additional routes have been surveyed periodically since 1976, but are not scheduled to be surveyed again until 2011. The 2007 annual survey routes were completed between April 30th and May 7th. Observers

recorded the number of roosters (male pheasants) heard during a 2-minute period at 20 stops spaced at 1-mile intervals along each route. Counts were started 30 minutes before sunrise and were not conducted during inclement weather.

Results

In 2007, a total of 71 roosters were heard at 80 stops (0.89 roosters/stop) along the four annual survey routes. The 2007 count was less than (-23%) the 1.15 roosters per stop of the 2006 count, but the difference was not significant ($P=0.300$). The 0.89 roosters/stop in 2007 was also not significantly lower (-34%) than the 10-year average of 1.34 roosters per stop ($P=0.109$), even though it was the lowest rooster/stop proportion since 0.81 roosters were heard per stop in 2001. The only comparison that showed a significant difference was between the 2007 count and the long-term average ($P=0.00004$). The 2007 count was 71% lower than the long-term (+30 years) average of 3.09 roosters per stop.

Discussion

The substantial long-term decline in Indiana's ring-necked pheasant population is primarily due



to the loss of suitable habitat for nesting and raising young. Currently, little more than 250,000 acres of farmland are idle across the state. This equates to more than a 90% loss of potential game bird habitat when compared to the late 1960's and early 1970's. Because much of this habitat has been swallowed up by urban and suburban development, Indiana's pheasant population will likely never again resemble the number of birds that existed during the "glory days" of 40 years ago. This huge loss of habitat has also devastated Indiana's quail and rabbit populations.

However, Indiana landowners can take advantage of some federal programs including the Continuous Conservation Reserve Program (CCRP) administered by the USDA Farm Service Agency. There are 2 CCRP practices in particular that are available to Indiana landowners and can create a noticeable benefit for Indiana's upland game: 1) CP-21 – filter strips, and 2) CP-33 – upland wildlife buffers. These buffer strips provide essential nesting cover for pheasants and other game birds while lessening erosion and improving water quality. For more information about these and other federal programs, contact your local USDA service center.

The Indiana Division of Fish and Wildlife also has programs that can provide landowners with support and funds to establish and/or maintain game bird habitat. These programs include the [Wildlife Habitat Cost-Share Program](#), the [Game Bird Habitat Development Program](#), and in designated pheasant priority areas, the [Pheasant Habitat Incentive Program](#). For additional information about these IDFW programs, contact your local district biologist or visit: <http://www.in.gov/dnr/fishwild/hunt/aid.htm>.

One simple tip landowners can use to substantially improve conditions for upland game on their land is to simply wait as long as possible to mow waterways and ditch banks (preferably after mid-August). This will provide safe cover for hen pheasants to nest and raise their young.

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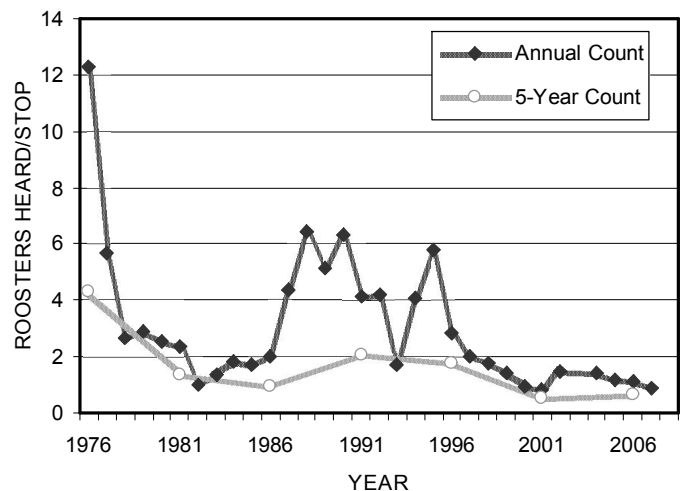


Figure 1: The average number of ring-necked pheasants heard crowing at each stop along 4 routes of the annual pheasant crowing count surveyed in Newton and Benton County (black line) between 1976-2007 and along 15 routes of an expanded count (gray line) located throughout Indiana's pheasant range and conducted every 5 years between 1976-2006. The crowing count conducted in 5-year intervals will not be surveyed again until 2011.